Hook Junior School Whole School Computing Curriculum Overview

<u>Aims</u>

Areas of study shown in **bold** below are statutory from the national curriculum. Those not in bold are suggested areas of study, linked with the overall topic for that term, and may be able to be changed or adjusted.

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- □ can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- □ are responsible, competent and confident

Key stage 2

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- □ use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- □ use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- □ understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- □ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

	Autumn Term			
	Year 3	Year 4	Year 5	Year 6
	TITLE/S	TITLE/S	TITLE/S	TITLE/S
	NC areas of focus	NC areas of focus	NC areas of focus	NC areas of focus
Concepts	Using technology responsibility. Exploring algorithms (sequencing). Accuracy when searching for information. Safely communicating online. Decomposition – breaking it down into manageable chunks.	Using technology responsibility. Exploring algorithms (sequencing). Accuracy when searching for information. Safely communicating online. Decomposition – breaking it down into manageable chunks.	Using technology responsibility . Exploring algorithms (sequencing). Accuracy when searching for information. Safely communicating online. Decomposition – breaking it down into manageable chunks.	Using technology responsibility . Exploring algorithms (sequencing). Accuracy when searching for information. Safely communicating online. Decomposition – breaking it down into manageable chunks.
Prior Knowledg e	See subject content for Key Stage 1 at the bottom of this document.	See Year 3 knowledge	See Year 3 and 4 knowledge	See Year 3, 4 and 5 knowledge

	Information technology	Information technology	Information technology	Information technology
	I know how to use a computer responsibly and effectively	I know how to create a presentation using an appropriate software (PowerPoint etc)	I know how to insert a table, adjust settings and save a copy as a pdf file	I know how to use various display features to communicate to an audience: e.g. fact/definition boxes, annotated illustration,
	I know how to accurately save my work	I know how to add slides and change layout	I know how to plan, carry out and interpret results of an	leaflet layout.
		I know how to format slides to suit purpose	investigations	I know how to delete/insert and replace text to improve clarity
	Computing science	I know how to add pictures and move around	I know how to use a simple layout to create a simple	and mood.
	I know what an algorithm is and how it works	I know how to reorder slides and view the slideshow	spreadsheet model and use it to solve problems.	I know how to make corrections using a range of tools (eg
	I know that I can use a series of commands in a	Computing esigned	I know how to change variables in a spreadsheet (e.g.	spell check, find and replace)
	programming language to generate certain outputs (images, sound, sprite moving in a certain	Computing science I know that there may be more than one algorithm	Excel) to solve problems I know how to enter formulae for the four operations (+-x/)	I know how to develop confidence using both hands when typing
	direction)	needed to get to a certain point.	into a spreadsheet	typing
	I know when a problem has occurred	I know how to break down simple everyday algorithm	I know how to use 'SUM' to calculate the total of a set of	Computing science
		into parts	numbers in a range of cells	I know how to create a programme by decomposing the parts
	Digital literacy	I know how to write a simple algorithm	I know how to use slides to effectively present	and then solving the parts separately.(Algorithms)
	I know that there are safe search engines that I can use to find information	I know how to debug errors independently	I know how to add sound and video file as an object and when this is purposeful	I know how to adapt a given design for a new purpose (Design)
		Digital literacy	when this is purposeiu	I know how to redesign an algorithm for a new purpose
	Online safety	I know how to use internet search engines effectively		I know how variables interact with other variables (Variables)
	I know how to keep myself safe when	I know of different search engines and discuss their	Computing science	I know how to break down code to find exact error by running
	communicating online	various features (e.g. Google image & video search).	Complete unfinished algorithms with selection or	sections of code (Debugging)
	See National Online Safety apositis abientives	I know how to change the 'Search Settings' to Strict in	repetition	<u>Scratch specific objectives – as other years and relevant to</u>
	See National Online Safety specific objectives attached	Google.	Design Create multiple sequences that run together in own	<u>game/design.</u>
		Online safety	design	Digital literacy
		I know that not everything you find online is accurate	Variable use	I know how to alter the theme and appearance of their blog,
		and that information needs to be checked and	Variable used to hold a number or a word and reported	adding background images etc.
		evaluated.	Variables that changes inside a loop	I know how to create a new post, save it as a draft and publish
		I know sensitive and appropriate language when using online communication tools.	Debugging Debug variable errors independently	it. I know how to embed photos, hyperlinks and videos into posts.
		I know when it is unsafe to open an email or an email	Scratch specific objectives	I know how to reorganise posts and remove posts they no
		attachment.	Design their own game including sprites, backgrounds,	longer want.
		I know what cyberbullying is and the difference and	scoring and/or timers.	I know how to like/follow other blogs and build up their blog
		similarities with offline bullying	Their game uses conditional statements, loops, variables	content over the year.
7			and broadcast messages. Their game finishes if the player wins or loses and the	I know which online communication tool is the most
Ž		See National Online Safety specific objectives	player knows if they have won or lost.	appropriate to use for a particular purpose, e.g. email, discussion forums, podcast, or multi-user documents.
Ş		attached	Evaluate the effectiveness of their game and debug.	I know the issues to do with Social Networking. E.g. giving too
<u></u>			5 5	much information, people using information online, not
å			Digital literacy	knowing who is at the other end of the conversation.
Knowledge			I know when using the Internet to research work,	Outline aufatu
Ø			recognise the need to ask appropriate questions to find appropriate answers.	Online safety I know I need to use a range of sources to check the validity of
			I know that good online research involves interpreting	a website.
			information, rather than copying.	I know that different viewpoints can be found on the web. They
			I know how to carry out more refined web searches by	critically evaluate the information they use, and understand
			using key words and symbols.	some of the potential dangers of not doing so.
			I know how to evaluate search results and refine as necessary for the best results.	I know how to select copyright free images and sounds from sources such as the Audio Networks and NEN image gallery.
			here and a solution of the sol	I know to be aware of the issues of plagiarism, copyright and
			Online safety	data protection in relation to their work.
			I know that information found on websites may be	I know how to discuss the positive and negative impacts a
			inaccurate or biased and to check the validity of a website.	digital footprint I know how to discuss the use of technology and its wider
			I know how to use websites where resources can be	effect on society
			downloaded without infringing copyright.	Know that malicious adults use the Internet and attempt to
			I know to acknowledge sources used in their work.	make contact with children and know how to report abuse.
			I know to be aware of the different forms of technology	
			that can be used to access the Internet and communicate with others.	See National Online Safety specific objectives attached
			See National Online Safety specific objectives	
			attached	

	Information technology	Information technology	Information technology	Information technology
	I can switch a computer on and off	I can save screenshot and resize images	I can insert a table, adjust settings and save a copy as a	Word processing
	I can log on/off	I can understand purpose and audience of a	pdf file	I can use various display features to communicate to an
	I can care for technological equipment	presentation	I can develop confidence in using multiple fingers and	audience: e.g. fact/definition boxes, annotated illustration,
	I can save work	I can add slides and change layout	both hands to enter text	leaflet layout.
	I can resize windows	I can add pictures and navigate round the slide show	I can plan and carry out an investigation using data	I can delete/insert and replace text to improve clarity and
	l can create a folder	I can format slides to suit purpose	logging technology	mood.
	I can print out my work	l can re-order slides	I can interpret results, draw conclusions and analyse the	I can make corrections using a range of tools (eg spell check,
	r can philt out my work	I call le-older sides	effectiveness of the technology	find and replace)
		Computing science	8,	
	Computing opiones	Computing science	I can use a simple layout demonstrated by the teacher,	I can develop confidence using both hands when typing
	Computing science	I can recognise that there may be more than one	create a simple spreadsheet model and use it to solve	Computing acience
	I can break down simple everyday algorithm into	algorithm needed to get to a certain point.	problems.	Computing science
	parts	I can break down simple everyday algorithm into parts	I can change variables in a spreadsheet (e.g. Excel) to	Algorithms
	I can observe a working programme and understand what it does	I can write a simple algorithm I can design an algorithm for a specific person or	solve problems	I can create a programme by decomposing the parts and then
	I can follow a set of instructions to create a	outcome	I can make predictions and changes and check results. I can enter formulae for the four operations (+-x/) into a	solving the parts separately.
	program	I can change one part of the programme to make it my	spreadsheet	Design I can adapt a given design for a new purpose
	I can identify where there might be a problem	own.	I can use 'SUM' to calculate the total of a set of numbers	I can redesign an algorithm for a new purpose
	r can identify where there might be a problem	I can identify where there might be a problem	in a range of cells	Variables
	Digital literacy	I can debug errors independently	I can change data in a spreadsheet to answer 'what if?'	I can understand how variables interact with other variables
	I can understand the difference between reliable	real debug errors independently	questions and check predictions	Debugging
	and unreliable information on the internet and know	Digital literacy	I can use slides to effectively present	I can break down code to find exact error by running sections
	how to search for it	I can use internet search engines to gather resources	I can know how to add sound and video file as an object	of code
		for my own research work.	and when this is purposeful	Scratch specific objectives – as other years and relevant to
	Online safety	I can be aware of different search engines and discuss		game/design.
	Education for a connected world c and p	their various features (e.g. Google image & video	Computing science	
	·····	search).	I can complete unfinished algorithms with selection or	Digital literacy
	See National Online Safety specific objectives	,	repetition	Communication and collaboration
	attached	Online safety	I can design and create multiple sequences that run	I can alter the theme and appearance of their blog, adding
		I can use sensitive and appropriate language when	together in own design	background images etc.
		using online communication tools.	I can change variables inside a loop	I can create a new post, save it as a draft and publish it.
		I can develop an understanding of cyberbullying and	I can debug variable errors independently	I can embed photos, hyperlinks and videos into posts.
ŝ		the difference and similarities with offline bullying	I can design my own game including sprites,	I can reorganise posts and remove posts they no longer want.
Skills			backgrounds, scoring and/or timers.	I can like/follow other blogs and build up their blog content
Ξ		See National Online Safety specific objectives	I can include conditional statements, loops, variables and	over the year.
S		attached	broadcast messages.	I can decide which online communication tool is the most
			I can evaluate the effectiveness of their game and debug.	appropriate to use for a particular purpose, e.g. email,
			Bis to Life and	discussion forums, podcast, or multi-user documents.
			Digital literacy	I can recap issues to do with Social Networking. E.g. giving too
			When using the Internet to research work, I can recognise	much information, people using information online, not
			the need to ask appropriate questions to find appropriate answers.	knowing who is at the other end of the conversation.
			I can research online and interpret information, rather than	Online safety
			copying.	I can use a range of sources to check the validity of a website.
			I can carry out more refined web searches by using key	I can recognise that different viewpoints can be found on the
			words and symbols.	web. They critically evaluate the information they use, and
			I can evaluate search results and refine as necessary for	understand some of the potential dangers of not doing so.
			the best results.	I can select copyright free images and sounds from sources
			I can use my knowledge of domain names to aid my	such as the Audio Networks and NEN image gallery.
			judgment of the validity of websites.	I can be aware of the issues of plagiarism, copyright and data
			, , , , , , , , , , , , , , , , , , , ,	protection in relation to their work.
				I can discuss the positive and negative impacts a digital
			Online safety	footprint
			I know that information found on websites may be	I can discuss the use of technology and its wider effect on
			inaccurate or biased and to check the validity of a	society
			website.	Know that malicious adults use the Internet and attempt to
			I can use websites where resources can be downloaded	make contact with children and know how to report abuse.
			without infringing copyright.	
			I can acknowledge sources used in their work.	See National Online Safety specific objectives attached
			I can be aware of the different forms of technology that	
			can be used to access the Internet and communicate with	
			others. See National Online Safety apositis objectives	
			See National Online Safety specific objectives attached	
			utuonod	

	Information technology Understanding the best way to save information	Information technology Understand how to create a presentation using an	Information technology Understand how to insert a table, adjust settings and save	Information technology Word processing
	(student resources) so it can be easily found	appropriate software (PowerPoint etc)	a copy as a pdf file	I understand how to use various display features to
	Understanding the importance of have a good	Understand how to add slides and change layout	Understand how to use data logging technology	communicate to an audience: e.g. fact/definition boxes,
	naming convention when saving work and creating folders (class names)	Understand how to format slides to suit purpose understand how to add pictures and move around	Understand how to interpret results, draw conclusions and analyse the effectiveness of the technology	annotated illustration, leaflet layout. I understand how to delete/insert and replace text to improve
	To understand that to be able to find their previous	Understand how to reorder slides and view the	Understand how to change variables in a spreadsheet	clarity and mood.
	work, they need to understand the file structure on the network	slideshow	(e.g. Excel) to solve problems Understand how to enter formulae for the four operations	I understand how to make corrections using a range of tools (eg spell check, find and replace)
		Computing science	(+-x/) into a spreadsheet	I understand how to develop confidence using both hands
		Understand that there may be more than one algorithm	Understand how to use 'SUM' to calculate the total of a	when typing
	Computing science	needed to get to a certain point.	set of numbers in a range of cells	when typing
	Understanding that everyday tasks can be	Understand how to break down simple everyday	Understand how to use slides to effectively present and	Computing science
	represented in algorithm form	algorithm into parts	how to add sound and video file as an object and when	Algorithms
	Understand that an algorithm is a set of	Understand simple algorithms	this is purposeful	I understand how to create a programme by decomposing the
	instructions that can be followed by someone else	Understand where there might be a problem		parts and then solving the parts separately.
	Understand that an algorithm might not be	Understand how to debug errors independently	Computing science	Design
	accurate and being able to recognise mistakes		Complete unfinished algorithms with selection or	I understand how to adapt a given design for a new purpose
	Understand the term debugging (children do not		repetition	I understand how to redesign an algorithm for a new purpose
	need to debug independently but do need to know	Digital literacy	Design	Variables
	when there is a problem)	Understand that different search engines and discuss	Create multiple sequences that run together in own	I understand how variables interact with other variables
	Divited literature	their various features (e.g. Google image & video	design	Debugging
	Digital literacy	search).	Variable use	I understand how to break down code to find exact error by
	Understand that there are child friendly searches that take away unwanted inappropriate content	Understand how to change the 'Search Settings' to Strict in Google.	Variable used to hold a number or a word and reported Variables that changes inside a loop	running sections of code Scratch specific objectives – as other years and relevant to
	(swiggle, skoogle etc)	Understand the importance of framing questions into	Debugging	game/design.
	I understand the difference between reliable and	search criteria when conducting web searches.	Debugging Debug variable errors independently	<u>game/design.</u>
	unreliable information on the internet	search ontena when conducting web searches.	Scratch specific objectives	Digital literacy
_		Online safety	Design their own game including sprites, backgrounds,	Communication and collaboration
Jr		Understand that not everything you find online is	scoring and/or timers.	I understand how to alter the theme and appearance of their
br	Online safety	accurate and that information needs to be checked and	Their game uses conditional statements, loops, variables	blog, adding background images etc.
e	Understand the relationship between the online	evaluated.	and broadcast messages.	I understand how to create a new post, save it as a draft and
S	and physical world	Understand the need for sensitive and appropriate	Their game finishes if the player wins or loses and the	publish it.
Understanding	Understand when communication is used	language when using online communication tools.	player knows if they have won or lost.	I understand how to embed photos, hyperlinks and videos into
ī	effectively and that there can be unpleasant form of	Understand cyberbullying and the difference and	Evaluate the effectiveness of their game and debug.	posts.
di	this.	similarities with offline bullying	-	I understand how to reorganise posts and remove posts they
n	Understand what they need to do about any	See National Online Sefety energific chiestives	Digital literacy	no longer want.
g	unwanted, unpleasant form of communication. Understand what personal information needs to be	See National Online Safety specific objectives attached	I understand when using the Internet to research work, recognise the need to ask appropriate questions to find	I understand how to like/follow other blogs and build up their blog content over the year.
	kept private	attached	appropriate answers.	I understand which online communication tool is the most
	Understand that passwords need to be kept private		I understand that good online research involves	appropriate to use for a particular purpose, e.g. email,
			interpreting information, rather than copying.	discussion forums, podcast, or multi-user documents.
	See National Online Safety specific objectives		I understand how to carry out more refined web searches	I understand issues to do with Social Networking. E.g. giving
	attached		by using key words and symbols.	too much information, people using information online, not
			I understand how to evaluate search results and refine as	knowing who is at the other end of the conversation.
			necessary for the best results.	
			I understand to use my knowledge of domain names to	Online safety
			aid their judgment of the validity of websites.	I can use a range of sources to check the validity of a website. I can recognise that different viewpoints can be found on the
			Online safety	web. They critically evaluate the information they use, and
			I understand that information found on websites may be	understand some of the potential dangers of not doing so.
			inaccurate or biased and to check the validity of a	I can select copyright free images and sounds from sources
			website.	such as the Audio Networks and NEN image gallery.
			I understand how to use websites where resources can be	I can be aware of the issues of plagiarism, copyright and data
			downloaded without infringing copyright.	protection in relation to their work.
			I understand to acknowledge sources used in their work.	I can discuss the positive and negative impacts a digital
			I understand that different forms of technology that can be used to access the Internet and communicate with others.	footprint I can discuss the use of technology and its wider effect on
			used to access the internet and communicate with others.	society
			See National Online Safety specific objectives	Know that malicious adults use the Internet and attempt to
			attached	make contact with children and know how to report abuse.
				See National Online Safety specific objectives attached

Promoting safe and responsible use of the internet			
		•	
	Sp	ring term	
 			V O
Year 3	Year 4	Year 5	Year 6

-	Information technology	Information technology	Information technology	Information technology
Knowledge	Word processing	Data	Data	Data
2	I know how to type using capitals through shift or	I know how to enter data into a graphing package and	I know how to plan an investigation using data logging	I know how to identify a problem which can be solved by
9	caps lock	use it to create a range of graphs, and to interpret data	technology	collecting data
<	I know how to delete using backspace or delete	across all subjects	I know how to make predictions for this investigation and	I know which data I need to collect
e				
ä	button	I know how to compare how different graphs can be	understand how to make it a fair test	I know how to collect data in an efficient and accurate way
Ð	I know how to highlight text to bold, italicize and	used for different purposes	I know how to carry out the investigation, ensuring	I know how to organise data by designing fields and records in
Φ	underline, change font type, colour and size, align	I know how to create and use a branching database to	accuracy	a database
	text left, right, centre	organise, reorganise and analyse information	I know how to interpret results, draw conclusions and	I know how to interpret data by using a range of searches and
	I know how to hold hands over each half of the	I know how to compare the use of graphing software,	analyse the effectiveness of the technology	graphs
	keyboard and begin to use more than two fingers	branching database and card-based database for	I know how to change variables in a spreadsheet (e.g.	I know how to draw conclusions from data
	to enter text	organising and interpreting data	Excel) to solve problems	I know how to use conclusions to solve the original problem
		I know how to explore some real-life examples of	I know how to make predictions and changes and check	I know how to present findings to a specified audience
	Computing science	branching databases, such as keys for animal	results.	to justify reasons for their choices and explain why other
	Algorithms	identification	I know how to enter formulae for the four operations (+-x/)	methods were not appropriate
	I know how to break down a simple everyday		into a spreadsheet	Computing science
	algorithm into parts (e.g. making breakfast)	Computing science	I know how to use 'SUM' to calculate the total of a set of	Algorithms
	Read and follow written algorithms – instruction	Algorithms	numbers in a range of cells	I know how to create a programme by decomposing the parts
	writing	I know that there are more than one algorithm to get to	I know how to change data in a spreadsheet to answer	and then solving the parts separately.
	Design	a certain point	'what if?' questions and check predictions	Design
	I know how to follow a set of instructions to create	I know how to write a simple algorithm using words	I know how to use a simple layout demonstrated by the	I know how to adapt a given design for a new purpose
	a programme	I know how to design an algorithm for a specific person	teacher, create a simple spreadsheet model and use it to	I know how to redesign an algorithm for a new purpose
	Debugging:	or group of people	solve problems.	Variables
				I know how variables interact with other variables
	I know when to recognise there is a problem and	Design	Computing opiones	
	say what the problem i	I know how to change one part of a programme to	Computing science	Debugging
	Scratch specific objectives	make it their own	Algorithms	I know how to break down code to find exact error by running
	I know how to navigate the Scratch programming	I know how to adapt a given design for a new purpose	I know how to complete unfinished algorithms with	sections of code
	environment.	Debugging	selection or repetition	Scratch specific objectives – as other years and relevant to
	I know how to create a background and sprite for a	I know how to debug simple sequence errors	Design	game/design.
	game.	independently	I know how to create multiple sequences that run together	Digital literacy
	I know how to add inputs to control my sprite.	I know how to debug simple selection and repetition	in own design	Digital Media
	I know how to use conditional statements (if	errors independently	Variable use	I know how to explore the features of a given video editing or
	then) within my game.	Scratch specific objectives	I know how to add variables that change inside a loop	animation package
		I know how to add inputs to control their sprite.	Debugging	I know how to plan a storyboard for a video or animation to suit
	Digital literacy	I know how to use repeat functions to create a piece of	I know how to debug variable errors independently	a purpose
	Online safety	music	Scratch specific objectives	I know how to film, create, edit and refine to ensure quality;
		I know how to use programming to control a physical	I know how to design my own game including sprites,	present to an audience
	See National Online Safety apositis objectives	device		present to an addience
	See National Online Safety specific objectives	device	backgrounds, scoring and/or timers.	
	attached		I know how to use conditional statements, loops, variables	Online safety
		Digital literacy	and broadcast messages.	
		Digital media	I know how to evaluate the effectiveness of their game	See National Online Safety specific objectives attached
		Graphics	and debug.	
		I know how to import a photograph and explore the	, i i i i i i i i i i i i i i i i i i i	
		effects which can be created	Digital literacy	
		I know how to use a range of visual effects such as	Communication and collaboration	
		filters, hues and painting over photographs.	I know that files may be saved off their device in 'clouds'	
		I know how to create patterns and montages	(servers).	
		I know how to select areas and manipulate to give	I know how to upload/download a file to the cloud on	
		different effects.	different devices.	
		Music and Sound	I know about syncing files using cloud computing folders.	
		I know to listen to a variety of radio programmes to		
		evaluate their style	Online safety	
			I know how to develop strategies to ignore or cancel	
		I know how to write a script for a radio programme		
		I know how to plan and record audio for a radio	unsolicited advertising (pop-ups, banners, videos or	
		program, eg interview, news broadcast, advert, cookery	audio).	
		programme	I know how social networks work, that they have age	
		I know how to evaluate and re-record (maybe editing)	limits, and what is appropriate and inappropriate	
		I know how to publish work online as a podcast	I know what online chatting involves, keeping safe and	
		. ,	how you know who you are talking to	
		Online safety	I know the issues surrounding social networks and	
			cyberbullying and understanding the impact on an	
		See National Online Safety specific objectives	individual of sending or uploading unkind or inappropriate	
		attached	content.	
			See National Online Safety specific objectives	
			attached	

 Provide single statistication in servide single statistication in a servi	T	lafe was stire to share be water and	lufamation to share la ma	lufermanting to also as	Information to should me
 I can apply but to to be, lance, underland, but to be offer a payment is a straight of the base of the payment is a straight of the base of the payment is a straight of the base of the payment is a straight of the base of the payment is a straight of the payment i	ŝ	Information technology	Information technology	Information technology	Information technology
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 I can nechaniza surgite security a surgite security of the securi		change font type, colour and size	I can compare how different graphs can be used for	I can carry out the investigation, ensuring accuracy	I can organise data by designing fields and records in a
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I can plan and record audio for a radio program, eg interview, news broadcast, advert, cookery programme I can evaluate and re-record (maybe editing) I can publish work online as a podcastadvertising (pop-ups, banners, videos or audio). I can understand how social networks work, that they have age limits, and what is appropriate and inappropriate I can understand what online chatting involves, keeping safe and how you know who you are talking to I can be aware of the issues surrounding social networks and cyberbullying and understanding the impact on an individual of sending or uploading unkind or inappropriate content.See National Online Safety specific objectives attachedSee National Online Safety specific objectives attachedSee National Online Safety specific objectives attachedSee National Online Safety specific objectives			their style	Online safety	
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interview, news broadcast, advert, cookery programme I can understand how social networks work, that they I can evaluate and re-record (maybe editing) I can understand how social networks work, that they I can publish work online as a podcast I can understand what is appropriate and inappropriate I can publish work online as a podcast I can understand what online chaining involves, keeping Safe and how you know who you are talking to I can be aware of the issues surrounding social networks and cyberbullying and understanding the impact on an individual of sending or uploading unkind or inappropriate content. See National Online Safety specific objectives attached See National Online Safety specific objectives					
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attached content. See National Online Safety specific objectives				and cyberbullying and understanding the impact on an	
See National Online Safety specific objectives					
			attached	content.	
				See National Online Sefety and office a big atting	
				allached	
	l				

_	Information technology	Information technology	Information technology	Information technology
Understanding	Word processing	Data	Data	Data
5	To understand how to use the following word	I understand how to enter data into a graphing	I understand how to plan an investigation using data	I understand how to identify a problem which can be solved by
le	processing skills to:	package and use it to create a range of graphs, and to	logging technology	collecting data
ົດ	Type using capitals through shift or caps lock	interpret data across all subjects	I understand how to make predictions for this investigation	I understand how to identify which data to collect
Ť	Delete using backspace or delete	I understand how to compare how different graphs can	and understand how to make it a fair test	I understand how to collect data in an efficient and accurate
ПК	Highlight text to bold, italicize and underline	be used for different purposes	I understand how to carry out the investigation, ensuring	way
ā	Changing font type, colour and size	I understand how to search a branching database	accuracy	I understand how to organise data by designing fields and
- Si	Align text left, right, centre and justify	I understand how to create and use a branching	I understand how to interpret results, draw conclusions	records in a database
ū	Hold hands over each half of the keyboard and	database to organise, reorganise and analyse	and analyse the effectiveness of the technology	I understand how to interpret data by using a range of
	begin to use more than two fingers to enter text	information	I understand how to change variables in a spreadsheet	searches and graphs
	0	I understand how to compare the use of graphing	(e.g. Excel) to solve problems	I understand how to draw conclusions from data
	Computing science	software, branching database and card-based database for organising and interpreting data	I understand how to make predictions and changes and check results.	I understand how to use conclusions to solve the original problem
	Algorithms To understand how to break down a simple	I understand how to explore some real-life examples of	I understand how to enter formulae for the four operations	I understand how to present findings to a specified audience
	everyday algorithm into parts (e.g. making	branching databases, such as keys for animal	(+-x/) into a spreadsheet	I understand how to justify reasons for their choices and
	breakfast)	identification	I understand how o use 'SUM' to calculate the total of a	explain why other methods were not appropriate
	To understand a working programme and think		set of numbers in a range of cells	Computing science
	about how it may be decomposed	Computing science	I understand how to change data in a spreadsheet to	Algorithms
	Design	Algorithms	answer 'what if?' questions and check predictions	I understand how to create a programme by decomposing the
	To understand how to follow a set of instructions to	I understand that there are more than one algorithm to	I understand how to use a simple layout demonstrated by	parts and then solving the parts separately.
	create a programme	get to a certain point	the teacher, create a simple spreadsheet model and use it	Design
	Debugging:	I understand how to write a simple algorithm using	to solve problems.	I understand how to adapt a given design for a new purpose
	To understand that there is a problem and say	words		I understand how to redesign an algorithm for a new purpose
	what the problem is	I understand how to design an algorithm for a specific	Computing science	Variables
	To understand where the problem might be	person or group of people	Algorithms	I understand that variables interact with other variables
	Scratch specific objectives	Design	I understand how to complete unfinished algorithms with	Debugging
	To understand how to navigate the Scratch	I understand how to change one part of a programme to	selection or repetition	I understand how to break down code to find exact error by
	programming environment.	make it their own	Design	running sections of code
	To understand how to create a background and	I understand how to adapt a given design for a new	I understand how to create multiple sequences that run	Scratch specific objectives – as other years and relevant to
	sprite for a game. To understand how to add inputs to control my	purpose	together in own design Variable use	game/design.
	sprite.	Debugging I understand how to debug simple sequence errors	I understand how variables changes inside a loop	Digital literacy
	To understand how to use conditional statements	independently	Debugging	Digital Media
	(if then) within my game.	I understand how to debug simple selection and	I understand how to debug variable errors independently	I understand how to explore the features of a given video
	(ii uieii) wiuiiii iiy gaine.	repetition errors independently	Scratch specific objectives	editing or animation package
	Digital literacy.	Scratch specific objectives	I understand how to design their own game including	I understand how to plan a storyboard for a video or animation
	g	I understand how to add inputs in to control my sprite.	sprites, backgrounds, scoring and/or timers.	to suit a purpose
	Online safety	I understand how to use repeat functions to create a	I understand how to use conditional statements, loops,	I understand how to film, create, edit and refine to ensure
	•	piece of music	variables and broadcast messages.	quality; present to an audience
	See National Online Safety specific objectives	I understand how to use programming to control a	I understand the need to evaluate the effectiveness of my	
	attached	physical device	game and debug.	Online safety
		Digital literacy	Digital literacy	See National Online Safety specific objectives attached
		Digital media	Communication and collaboration	
		Graphics	I understand files may be saved off their device in 'clouds'	
		I understand how to import a photograph and explore	(servers).	
		the effects which can be created I understand how to use a range of visual effects such	I understand how to upload/download a file to the cloud on different devices.	
		as filters, hues and painting over photographs.	I understand about syncing files using cloud computing folders.	
		I understand how to create patterns and montages	i understand about syncing mes using cloud computing iolders.	
		I understand how to select areas and manipulate to	Online safety	
		give different effects.	I understand how to develop strategies to ignore or cancel unsolicited	
		Music and Sound	advertising (pop-ups, banners, videos or audio).	
		I understand the need to listen to a variety of radio programmes,	I understand how social networks work, that they have age limits, and	
		evaluating their style	what is appropriate and inappropriate	
		I understand how to write a script for a radio programme	I understand what online chatting involves, keeping safe	
		I understand how to plan and record audio for a radio program, eg	and how you know who you are talking to	
		interview, news broadcast, advert, cookery programme	I understand the issues surrounding social networks and	
		I understand how to evaluate and re-record (maybe editing)	cyberbullying and understanding the impact on an	
		I understand how to publish work online as a podcast	individual of sending or uploading unkind or inappropriate	
		Online safety	content.	
		Online Salety	See National Online Safety specific objectives	
		See National Online Safety specific objectives	attached	
		attached		

	Summer term				
	Year 3	Year 4	Year 5	Year 6	
Knowledge	Information technology Data I know how to collect information by designing and using a simple questionnaire to record numbers, text and choices. I know how to create record cards to store collected information (Junior Viewpoint) I know how to use a database to generate bar charts and graphs to answer questions I know how to answer questions by searching and	Information technology Word processing I know how to build lists using bullet points or numbers I know how to highlight and drag text I know how to move words through cut and paste I know how to check spelling and grammar I know how to change page orientation, view and size I know how to insert word art/picture and format when purposeful I know how to develop confidence in using multiple	Information technology Presentation I know how to use slides to effectively present I know how to add sound and video file as an object and when this is purposeful I know how to change running order and timings	Information technology Presentation I know how to use transitions and animations effectively with clear purpose, to add to presentation effect I know how to record a commentary to go alongside I know how to Use hyperlinks to create non-linear presentation	
	sorting the database (Excel/Viewpoint) Recap/address gaps from previous terms. Computing science Extend through additional projects linked to Topic Digital literacy Digital media I know how to use still and video cameras, independently I know how to take photographs with a digital microscope(equipment dependent) I know how to evaluate quality of footage taken I know how to evaluate quality of footage taken I know how to download still images and video I know how to sequence still images and video and use simple editing techniques to create a presentation I know how to create a simple animation either by using stop-motion techniques with a webcam, or by using animation software. Recap/address gaps from previous terms. Online safety Objectives tailored to address concerns for Year group – from Autumn objectives. See National Online Safety specific objectives attached	fingers to enter text Recap/address gaps from previous terms. Computing science Extend through additional projects linked to Topic. Digital literacy Communication and collaboration I know how to use at least two online communication methods (e.g. online survey (e.g. Survey Monkey) quiz, blog (e.g. Wizkids), shared folders) I know how to discuss the pros and cons of these communication methods I know the difference between different styles of online communication methods and their purposes Recap/address gaps from previous terms. Online safety Objectives tailored to address concerns for Year group – from Autumn objectives. See National Online Safety specific objectives attached	Recap/address gaps from previous terms. Computing science Extend through additional projects linked to Topic. Digital literacy Digital Media I know how to use different filming techniques and camera angles e.g. zoom, panning, wide shot etc to create different mood/perspective I know how to plan a video or animation by drawing a storyboard I know how to use a range of sound effects, music and voice-overs to create mood/ atmosphere I know how to select and edit sounds, text, movie clips and other effects to suit purpose and audience I know how to evaluate and improve work with a view to purpose and audience Music and sound I know how to collect sounds using sound editing software I know how to inport sounds into sound editing software I know how to alayer and edit sounds I know how to layer and edit sounds I know how to plan, create and refine either a radio programme or play with sound effects or a sonic postcard I know how to paye as a web compatible format - share online Recap/address gaps from previous terms. Online safety Objectives tailored to address concerns for Year group – from Autumn objectives. See National Online Safety specific objectives attached	Recap/address gaps from previous terms. Computing science App inventor: I know the role of the component designer, block editor, and phone/emulator I know how to create a simple app with button components to enable navigation I know how to add media (sounds and images) to apps and upload them from a computer I know how to test and run apps using App Inventor's live testing I know how to package an app and download them to a phone or tablet. Recap/address gaps from previous terms. Digital literacy Digital Media I know how to explore the features of a given video editing or animation package I know how to film, create, edit and refine to ensure quality; present to an audience Recap/address gaps from previous terms. Online safety Objectives tailored to address concerns for Year group – from Autumn objectives. See National Online Safety specific objectives attached	

Information technology Data I can collect information by design simple questionnaire to record n choices. I can create record cards to storn information (Junior Viewpoint) I can use a database to generate graphs to answer questions I can answer questions by searce the database (Excel/Viewpoint)	numbers, text and I can highlight and drag text I can move words through cut and paste re collected I can check spelling and grammar I can check spelling ond gramar I can che	Information technology Presentation I can use slides to effectively present I can add sound and video file as an object and when this is purposeful I can change running order and timings eful Recap/address gaps from previous terms.	Information technology Presentation I can use transitions and animations effectively with clear purpose, to add to presentation effect I can record commentary to go alongside I can use hyperlinks to create non-linear presentation
Recap/address gaps from previo Computing science Extend through additional project Digital literacy Digital media I can use still and video cameras I can take photographs with a di microscope(equipment depende I can evaluate quality of footage I can understand the need to fra the camera still I can download still images and I can sequence still images and simple editing techniques to creat I can create a simple animation of stop-motion techniques with a w animation software. Recap/address gaps from previot Online safety Objectives tailored to address co group – from Autumn objectives See National Online Safety spe attached	cts linked to TopicRecap/address gaps from previous terms. Computing sciences, independently igitalExtend through additional projects linked to Topic. Digital literacybigital entlyCommunication and collaboration I can use at least two online communication methods (e.g. online survey (e.g. Survey Monkey) quiz, blog (e.g. Wizkids), shared folders) I can discuss the pros and cons of these communication methods I can identify the difference between different styles online communication methods and their purposes online safetyous terms. oncerns for Year t.Objectives tailored to address concerns for Year statehed	to create mood/ atmosphere I can select and edit sounds, text, movie clips and other effects to suit purpose and audience I can evaluate and improve work with a view to purpose and audience Music and sound I can record sounds using sound editing software I can collect sounds from a variety of sources (online, digital sound recorder) I can import sounds into sound editing software I can player and edit sounds	Recap/address gaps from previous terms. Computing science App inventor: I can understand the role of the component designer, block editor, and phone/emulator I can create a simple app with button components to enable navigation I can add media (sounds and images) to apps and upload them from a computer I can test and run apps using App Inventor's live testing I can package an app and download them to a phone or tablet. Recap/address gaps from previous terms. Digital literacy Digital Media I can explore the features of a given video editing or animation package I can film, create, edit and refine to ensure quality; present to an audience Recap/address gaps from previous terms. Online safety Objectives tailored to address concerns for Year group – from Autumn objectives. See National Online Safety specific objectives attached

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C	Information technology Data	Information technology	Information technology Presentation	Information technology Presentation
Understanding		Word processing I understand how to build lists using bullet points or		I understand how to use transitions and animations effectively
Q	I understand how to collect information by	0 1	I understand how to use slides to effectively present	
ē	designing and using a simple questionnaire to	numbers	I understand how to add sound and video file as an object	with clear purpose, to add to presentation effect
S	record numbers, text and choices.	I understand how to highlight and drag text	and when this is purposeful	I understand how to record a commentary to go alongside
t	I understand how to create record cards to store	I understand how to move words through cut and paste	I understand how to change running order and timings	I understand how to use hyperlinks to create non-linear
ñ	collected information (Junior Viewpoint)	I understand how to check spelling and grammar		presentation
ā	I understand how to use a database to generate	I understand how to change page orientation, view and		
- E	bar charts and graphs to answer questions	size		
Ū	I understand how to answer questions by	I understand how to insert word art/picture and format		
	searching and sorting the database	when purposeful	Recap/address gaps from previous terms.	
	(Excel/Viewpoint)	I understand how to develop confidence in using	, , ,	Recap/address gaps from previous terms.
		multiple fingers to enter text		
				Computing science
	Recap/address gaps from previous terms.		Computing science	App inventor:
	Computing science	Recap/address gaps from previous terms.	Extend through additional projects linked to Topic.	I understand the role of the component designer, block editor,
	Extend through additional projects linked to Topic	Computing science	Digital literacy	and phone/emulator
	Digital literacy	Extend through additional projects linked to Topic.	Digital Media	I understand how to create a simple app with button
	Digital media	Digital literacy	I understand how to use different filming techniques and	components to enable navigation
	I understand how to use still and video cameras,	Communication and collaboration	camera angles e.g. zoom, panning, wide shot etc to	I understand how to add media (sounds and images) to apps
	independently	I understand how to use at least two online	create different mood/perspective	and upload them from a computer
	I understand how to take photographs with a digital	communication methods (e.g. online survey (e.g.	I understand how to plan a video or animation by drawing	I understand how to test and run apps using App Inventor's
	microscope(equipment dependent)	Survey Monkey) quiz, blog (e.g. Wizkids), shared	a storyboard	live testing
	I understand how to evaluate quality of footage	folders)	I understand how to use a range of sound effects, music	I understand how to package an app and download them to a
	taken I understand the need to frame shots and keep the	I understand how to discuss the pros and cons of these communication methods	and voice-overs to create mood/ atmosphere	phone or tablet.
	camera still	I understand the difference between different styles of	I understand how to select and edit sounds, text, movie	Recap/address gaps from previous terms.
		online communication methods and their purposes	clips and other effects to suit purpose and audience	Recap/address gaps from previous terms.
	I understand how to download still images and video	online communication methods and their purposes	I understand how to evaluate and improve work with a	Digital literacy
	I understand how to sequence still images and		view to purpose and audience	Digital Media
	video and use simple editing techniques to create a	Recap/address gaps from previous terms.	Music and sound	I understand how to explore the features of a given video
	presentation	Online safety	I understand how to record sounds using sound editing	editing or animation package
	I understand how to create a simple animation	Objectives tailored to address concerns for Year group	software	I understand how to plan a storyboard for a video or animation
	either by using stop-motion techniques with a	– from Autumn objectives.	I understand how to collect sounds from a variety of	to suit a purpose
	webcam, or by using animation software.	nom Autumn objectives.	sources (online, digital sound recorder)	I understand how to film, create, edit and refine to ensure
	webeam, or by doing animation software.	See National Online Safety specific objectives	I understand how to import sounds into sound editing	quality; present to an audience
	Recap/address gaps from previous terms.	attached	software I understand how to layer and edit sounds	
	Online safety		I understand now to layer and edit sounds I understand how to plan, create and refine either a radio	
	Objectives tailored to address concerns for Year		programme or play with sound effects or a sonic postcard	Recap/address gaps from previous terms.
	group – from Autumn objectives.		I understand how to save as a web compatible format -	Online safety
	g		share online	Objectives tailored to address concerns for Year group – from
	See National Online Safety specific objectives			Autumn objectives.
	attached		Recap/address gaps from previous terms.	
			necapraduress gaps nom previous terms.	See National Online Safety specific objectives attached
			Online safety	
			Objectives tailored to address concerns for Year group –	
			from Autumn objectives.	
			See National Online Safety specific objectives	
			attached	

	E-safety: Settings, safety, passwords, privacy, spam, virus, troll, phishing, file sharing, consent, security, social network, cyber bullying.	E-safety: Settings, safety, passwords, privacy, spam, virus, troll, phishing, file sharing, consent, security, social network, cyber bullying.	E-safety: Settings, safety, passwords, privacy, spam, virus, troll, phishing, file sharing, consent, security, social network, cyber bullying.	E-safety: Settings, safety, passwords, privacy, spam, virus, troll, phishing, file sharing, consent, security, social network, cyber bullying.
Key	Digital Literacy: Search engines, fake news, reliable, internet search, settings, research, draft, publish, edit, communication tools, consent, social networking, presentation. editing, quality.	Digital Literacy: Search engines, fake news, reliable, internet search, settings, research, draft, publish, edit, communication tools, consent, social networking, presentation. editing, quality.	Digital Literacy: Search engines, fake news, reliable, internet search, settings, research, draft, publish, edit, communication tools, consent, social networking, presentation. editing, quality.	Digital Literacy: Search engines, fake news, reliable, internet search, settings, research, draft, publish, edit, communication tools, consent, social networking, presentation. editing, quality.
[,] Vocabulary	Computing Science: Algorithm, program, debugging, instructions, problem, navigate, variables, decomposing, code, component, app,	Computing Science: Algorithm, program, debugging, instructions, problem, navigate, variables, decomposing, code, component, app, media.	Computing Science: Algorithm, program, debugging, instructions, problem, navigate, variables, decomposing, code, component, app, media.	Computing Science: Algorithm, program, debugging, instructions, problem, navigate, variables, decomposing, code, component, app, media.
lary	media. Information Technology: Logging on, saving, resizing, creating, printing, screenshots, images, presentation, slideshow, insert, adjust, save, display features, layout, typing, highlight predictions, database, data, logging, conclusions, spreadsheets.	<i>Information Technology:</i> Logging on, saving, resizing, creating, printing, screenshots, images, presentation, slideshow, insert, adjust, save, display features, layout, typing, highlight predictions, database, data, logging, conclusions, spreadsheets.	Information Technology: Logging on, saving, resizing, creating, printing, screenshots, images, presentation, slideshow, insert, adjust, save, display features, layout, typing, highlight predictions, database, data, logging, conclusions, spreadsheets.	Information Technology: Logging on, saving, resizing, creating, printing, screenshots, images, presentation, slideshow, insert, adjust, save, display features, layout, typing, highlight predictions, database, data, logging, conclusions, spreadsheets.
Key texts	Scratch/crumble book Vodafone Goldilocks – A fairy-tale for the modern age Oscar's adventures in the online world (National online safety)	Scratch/crumble book Vodafone Goldilocks – A fairy-tale for the modern age Oscar's adventures in the online world (National online safety)	Scratch/crumble book Vodafone Goldilocks – A fairy-tale for the modern age Oscar's adventures in the online world (National online safety)	Scratch/crumble book Vodafone Goldilocks – A fairy-tale for the modern age Oscar's adventures in the online world (National online safety)

Subject content (Key stage 1)

Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Self-image and identity

Learning Objectives

Year 3:

- · I can explain what is meant by the term 'identity'.
- · I can explain how people can represent themselves in different ways online.
- I can explain ways in which someone might change their identity depending on what they are doing online (e.g. gaming; using an avatar; social media) and why.

Year 4:

- · I can explain how my online identity can be different to my offline identity.
- I can describe positive ways for someone to interact with others online and understand how this
 will positively impact on how others perceive them.
- I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.

Year 5:

- · I can explain how identity online can be copied/modified or altered.
- I can demonstrate how to make responsible choices about having an online identity, depending on context.

Year 6:

- I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online.
- · I can explain the importance of asking until I get the help needed.

Online Relationships

Year 3:

- I can describe ways people who have similar likes and interests can get together online.
- I can explain what it means to 'know someone' online and why
 I can explain that there are some people I can communicate this might be different from knowing someone offline.
- I can explain what is meant by 'trusting someone' online, why this is different to 'liking someone' online, and why it is important to be careful about who to trust online including what information and content they are trusted with.
- I can explain why someone may change their mind about trusting anyone with something if they feel nervous, uncomfortable or worried.
- I can explain how someone's feelings can be hurt by what is said or written online.
- I can explain the importance of giving and gaining permission before sharing things online; how the principles of sharing online is the same as sharing offline e.g. sharing images and photos.

Year 4:

- I can describe strategies for safe and fun experiences in a range of online social environments e.g. livestreaming, gaming platforms.
- I can give examples of how to be respectful to others online and how to recognise healthy and unhealthy behaviours.
- I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts, feelings and beliefs.



- I can give examples of technology specific forms of communication (e.g. emojis, memes, gifs).
- with online who may want to do me or my friends harm/ I can recognise this is not my/our fault.
- I can describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make positive contributions. (e.g. gaming communities or social media groups)
- I can explain how someone can get help if they are having problems and identify when to tell a trusted adult.
- I can demonstrate how to support others (including those who are having difficulties) online.

Year 6:

Year 5:

- I can explain how sharing something online may have an impact positively or negatively.
- I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not.
- I can describe how things shared privately online can have unintended consequences for others. E.g. Screen-grabs.
- I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this.

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Online Reputation Learning Objectives

Year 3:

- · I can explain how to search for information about others online.
- I can give example of what anyone may or may not be willing to share about themselves online. I can explain the need to be careful before sharing.
- I can explain who someone can ask if they are unsure about putting something online.

Year 4:

- I can describe how to find out information about others by searching online.
- I can explain ways that some of the information about anyone online could have been created, copied or shared by others.

Year 5:

- I can search for information about an individual online and summarise the information found.
- I can describe ways that information about anyone online can be used by others to make judgements about an individual and why these may be incorrect.

Year 6:

- I can explain the ways in which anyone can develop a positive online reputation.
- I can explain strategies anyone can use to protect the 'digital personality' and online reputation, including degrees of anonymity.

Online Bullying

Year 3:

- I can describe appropriate ways to behave towards other people online and why this is important.
- I can give examples of how bullying behaviour could appear online and how someone can get support.

Year 4:

- I can recognise when someone is upset, hurt or angry online.
- I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat).
- I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affects how others feel about them (their reputation).

Year 5:

- I can recognise that online bullying can be different to bullying in the physical world and can describe some of those differences.
- I can describe how what one person perceives as playful joking and teasing (including banter) might be experienced by others as bullying.
- can explain how anyone can get help if they are being bullied online and identify when to tell a trusted adult.
- I can identify a range of ways to report concerns and access support both in school and at home about online bullying.
- I can explain how to block abusive users.
- I can describe the helpline services which can help people experiencing bullying, and how to access them (e.g. Childline or The Mix).

Managing online information

- I can describe how to capture bullying content as evidence (e.g. Screen-grab, URL, profile) to share with others who can help me.
- I can explain how someone would report online bullying in different contexts.





Year 5:

- I can explain the benefits and limitations of using different
 I can explain what is meant by a 'hoax'. I can explain why types of search technologies e.g. voice-activated search engine. I can explain how some technology can limit the information I am presented with e.g. voice-activated only giving one search result.
- I can explain what is meant by 'being sceptical'; I can give
 I can describe how some online information can be examples of when and why it is important to be sceptical.
- I can evaluate digital content and can explain how to make
 I can explain how and why some people may present choices about what is trustworthy e.g. differentiating between adverts and search results.
- I can explain key concepts including; information, reviews. fact, opinion, belief, validity, reliability and evidence.
- I can identify ways the internet can draw us to information for different agendas, e.g. website notifications, pop-ups, targeted ads.
- I can describe ways of identifying when online content has
 I can explain how companies and news providers target been commercially sponsored or boosted, (e.g. by commercial companies or by vloggers, content creators, influencers).
- I can explain what is meant by the term 'stereotype', how accepting 'stereotypes' may influence how people think about others.
- I can describe how fake news may affect someone's emotions and behaviour and explain why this may be harmful.

- someone would need to think carefully before they share.
- I can explain how search engines work and how the results are selected and ranked.
- I can explain how to use search technologies effectively.
- opinions and can offer examples.
- opinions as facts; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal.
- I can define the terms 'influence', 'manipulation', and 'persuasion' and explain how someone might encounter these online (e.g. advertising and 'ad targeting' and targeting for fake news.).
- people with online news stories they are more likely to engage with and how to recognise this.
- I understand the concept of persuasive design and how it can be used to influence peoples' choices.
- 'stereotypes' are amplified and reinforced online, and why

 I can demonstrate how to analyse and evaluate the validity of facts and information and I can explain why using these strategies are important.
 - I can describe the difference between online misinformation and disinformation.
 - I can explain why information that is on a large number of sites may still be inaccurate or untrue. I can assess how this might happen (e.g. the sharing of misinformation or disinformation.
 - I can identify, flag and report inappropriate content.

Year 3:

- I can demonstrate how to use key phrases in search engines to gather accurate information online.
- I can explain what autocomplete is and how to choose the best suggestion.
- I can explain how the internet can be used to buy and sell things
- I can explain the difference between a belief, an opinion and a fact and give examples of how and where they might be shared online. E.g. In videos, memes, posts, news stories etc.
- I can explain that not all opinions shared may be accepted as true or fair by others (E.g. monsters under the bed)
- I can describe and demonstrate how we can get help from a trusted adult if we see content that makes us feel sad, uncomfortable, worried or frightened.

Year 4:

- I can analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others.
- I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites).
- I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; in app purchases; pop ups) and can recognise some of these when they appear online.
- I can explain why lots of people sharing the same opinions or beliefs online do not make those beliefs or opinions true.
- I can explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and risks might be.
- I can explain what is meant by fake news e.g. why some people will create stories or alter photographs and put them online to pretend that something is true when it isn't.

Health, wellbeing and lifestyle



Year 3:

- I can explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships; I can give examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos).
- can explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or web sites).

Year 4:

- I can explain how using technology can be a distraction from other things, in both a positive and negative way.
- I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest Year 6: strategies to help with limiting this time.

Year 5:

- I can describe ways that technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively.
- I can describe some strategies, tips or advice to promote health and well-being with regards to technology.
- I can recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals.
- I can explain how and why some apps and games may request or take payment for additional content (e.g. in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing.

- I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.
- I recognise and can discuss the pressures that technology can place on someone and how/when they could manage this.
- I can recognise features of persuasive design and how they are used to keep users engaged (current and future use).
- I can assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise).

Privacy and security

Year 3:

- I can describe simple strategies for creating and keeping passwords private.
- I can give reasons why someone should only share information with people they choose to and can trust. I can explain that if they are not sure of feel pressured then they should tell a trusted adult.
- I can describe how connected devices can collect and share anyone's information with others.

Year 4:

- I can describe strategies for keeping personal information private, depending on context.
- I can explain that internet use is never fully private and is monitored e.g. adult supervision.
- I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure.
- I know what the digital age of consent is and the impact this has on online services asking for consent.

Year 5:

- I can explain what a strong password is and demonstrate how to create one.
- I can explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice messages, geolocation) with others.
- I can explain what app permissions are and can give some examples.

Copyright and ownership

- I can describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser.
- I can explain what to do if a password is shared, lost or stolen.
- I can describe how and why people should keep their software and apps up to date e.g. auto updates.
- I can describe simple ways to increase privacy on apps and services that provide privacy settings.
- · I can describes ways in which some online content targets
- people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing).
- I know that online services have terms and conditions that govern their use.



Year 3:

 I can explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause.

Year 4 :

- When searching on the internet for content to use, I can explain why I need to consider who
 owns it and whether I have the right to use it.
- I can give some simple examples of content which I must not use without permission from the owner e.g. videos, music, images.

Year 5:

- · I can assess and justify when it is acceptable to use the work of others.
- I can give examples of content that is permitted to be reused and know how this content can be found online.

- I can demonstrate the use of a search tool to find and access online content which can be reused by others.
- I can demonstrate how to make references to and acknowledge sources I have used from the internet.